

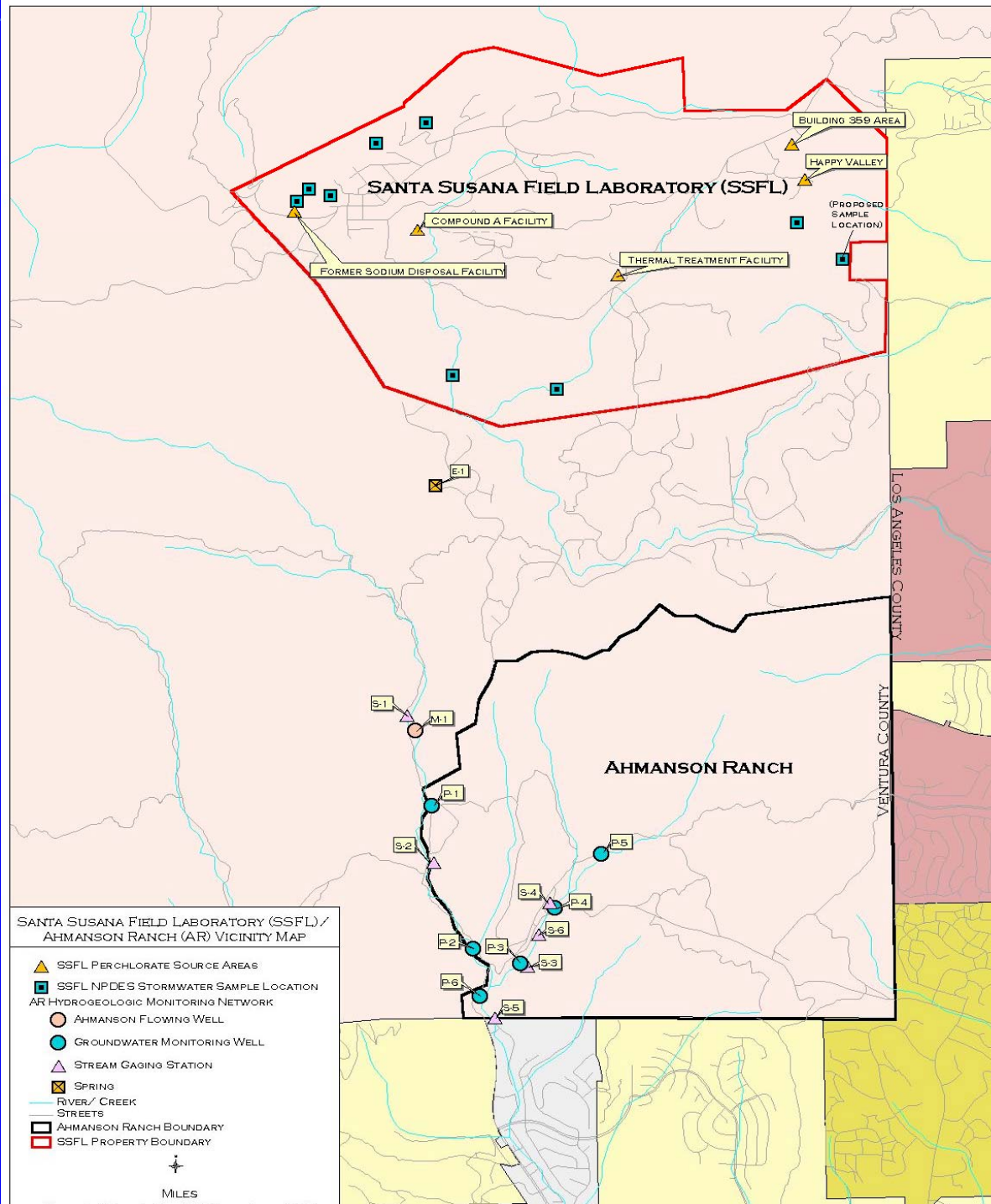
**Photo Documentation of Sampling
Procedure at Ahmanson Ranch
Well No. 1
June 17, 2003**

Presented by:

David A. Bacharowski

**Assistant Executive Officer
Groundwater Remediation Programs**

**Los Angeles Regional Water Quality
Control Board**



Background



Monitoring well M-1 at Ahmanson Ranch

- Monitoring well, M-1, is an inactive, artesian flowing, agricultural well.
- Property adjacent to Las Virgenes Creek
- Site vicinity includes undeveloped land to the west, residential properties to the south and east, and the community of Bell canyon to the north

Monitoring Well M-1



Uncapped monitoring well M-1 at
Ahmanson Ranch

- Drilled and installed in 1967
- 20-inch diameter borehole
- Initially drilled to a total depth of 1,945 feet bgs
- Well completed to a depth of 1,000 feet bgs
- Constructed of 12-inch diameter metal casing
- Screened at 380-510 feet bgs and 680-980 feet bgs

Monitoring Well M-1 (cont.)



Artesian flow from corroded well

- Continues to flow at ground surface
- Casing in the upper 100 feet consumed by corrosion
- Casing and sanitary seal began to fail
- Casing obstruction found at 576 feet below ground surface

Previous Sampling

- July 3, 2002

- Sampled by: Ahmanson Land Company
- Depth: 550 feet
- Reporting Limit: 4 ppb
- Perchlorate was not detected

- August 1, 2002

- Collaborative effort between Ahmanson Land Company and the County of Ventura
- Depths: Duplicate samples were taken at 50, 450, and 550 feet below ground surface by both parties
- Out of six samples and two duplicates, only the sample collected at a depth of 550 feet bgs by the County of Ventura reported to contain perchlorate at 28 ppb

Purpose of Sampling M-1



Uncapped monitoring well M-1 at
Ahmanson Ranch signs of corrosion are evident

- To resolve discrepancies in previous results with regards to perchlorate
- To establish and follow standard sampling and analysis procedures involving several regulatory agencies and interested parties
- To test for volatile organic compounds, n-nitrosodimethylamine (NDMA), and general mineral analyses

M-1 Sampling



Specific Depth Sampler Assembly

- The sampling event was conducted on June 17, 2003
- All sampling equipment was hand-carried to minimize adverse environmental impact
- Representatives from different agencies and interested parties attended
- Samples were taken at 450 and 550 feet bgs

Sampling Device



Specific Depth Sampler



Two Samplers Assembled in Tandem

Sampling Device (cont.)



Vacuum Line Attached



Wire Line Attached

Sampling Procedure



Wireline truck equipped with command console



Wireline truck equipped with command console

Sampling Procedure (cont.)



Depth Readout on Monitor



Retrieving sampler

Sampling Procedure (cont.)



Retrieving sampler



Preparing sampler to release
specific depth sample

Sampling Procedure (cont.)



Pre-subsampling Decon Rinse



Lower Sampler Valve

Sampling Procedure (cont.)



Opening Lower Sampling Valve



Opening Upper Sampling Valve

Sampling Procedure (cont.)



Collecting subsamples



Collecting subsamples

Sampling Procedure (cont.)



Disassembly for
Decontamination



Disassembly for
Decontamination

Sampling Procedure (cont.)



Decontamination of Sampler
Parts



Equipment Blank

Sampling Procedure (cont.)



Deep Sample Collection



Deep and Shallow Samples

Results (Preliminary)

- June 17, 2003 did not detect perchlorate or chlorinated VOCs in any sample
- July 16, 2003 sampling data, preliminary from Ahmanson Land Co and RWQCB was non-detect for perchlorate and chlorinated VOCs